Amdt. dated January 5, 2005

Reply to Office Action of October 5, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus for re-transmitting erroneous packet data

in a communication system, comprising:

a buffer coupled to store transmitted data;

a controller configured to control the buffer to allow a data re-transmission

function to be carried out; and

a radio frequency unit configured to transmit the data to a receiving apparatus,

wherein the buffer, the controller, and the radio frequency unit operate in a

physical layer, and

wherein the data re-transmission function re-transmits the transmitted data

stored in the buffer directly from the physical layer to a corresponding physical layer of the

receiving apparatus without receiving a copy of the transmitted data from another layer

above the physical layer.

2. (Canceled).

3

- 3. (Original) The apparatus of claim 1, wherein the buffer is adapted to store a final data frame.
- 4. (Original) The apparatus of claim 1, wherein the controller is adapted to transmit only data that has been previously transmitted with errors.
- 5. (Original) The apparatus of claim 1, wherein the communication system is a wireless local loop.
- 6. (Original) The apparatus of claim 1, wherein the data is re-transmitted from the buffer after a prescribed period of time if no acknowledgment of the transmitted data has been received.
- 7. (Original) The apparatus of claim 6, wherein the transmitted data stored in the buffer is stored as a final date frame in a physical layer.
- 8. (Original) The apparatus of claim 6, wherein the data is re-transmitted from the buffer before the expiration of the prescribed period of time if a negative acknowledgment is received.

- 9. (Original) The apparatus of claim 1, further comprising a timer configured to initiate a countdown when the data is transmitted, wherein the countdown of the timer is stopped and reset if an acknowledgment of the transmitted data is received before the timer expires.
- 10. (Original) The apparatus of claim 1, wherein the transmitted data stored in the buffer is re-transmitted from the buffer if a negative acknowledgment is received.
- 11. (Currently Amended) The apparatus of claim 10, wherein the transmission transmitted data stored in the buffer is stored as a final data frame in a physical layer.
- 12. (Currently Amended) A method for re-transmitting erroneous packet data, comprising:
 - (a) transmitting data while storing the data in a buffer on a physical layer; and
- (b) re-transmitting the data stored in the buffer if no acknowledgment signal is received within a prescribed period of time or if a negative acknowledgment signal is received.

wherein step (b) comprises:

re-transmitting the data stored in the buffer directly from the physical layer to a physical layer of a corresponding receiving apparatus without re-receiving the transmitted data from an upper layer.

13. (Original) The method of claim 12, wherein step (b) comprises:

terminating the re-transmission procedure if an acknowledgment signal is received; and

repeatedly checking whether or not the acknowledgment signal is received, until the prescribed period of time elapses if no acknowledgment signal is received.

- 14. (Original) The method of claim 12, wherein step (b) is repeatedly carried out until the acknowledgment signal is received.
- 15. (Original) The method of claim 14, wherein a timer tracks the prescribed period of time and is reset when the data is re-transmitted or when an acknowledgment is received.
- 16. (Original) The method of claim 12, wherein the buffer is adapted to store a final data frame.

- 17. (Original) The method of claim 16, wherein the re-transmission of the final data frame from the buffer occurs on the physical layer.
- 18. (Original) The method of claim 12, wherein the data re-transmission is made only for data involving errors.
- 19. (Original) The method of claim 12, wherein the data is transmitted in a wireless local loop.
- 20. (Currently Amended) A method of re-transmitting data in a communication system, comprising:

transmitting data from a transmitting terminal on a physical layer, said data being originally received from a layer above the physical layer;

storing the transmitted data in a physical layer buffer of the transmitting terminal; and

re-transmitting the stored data from the buffer if the transmission is faulty, wherein re-transmitting the stored data re-transmits the stored data directly from the physical layer to a physical layer of a receiving apparatus without re-receiving the data from another layer above the physical layer.

Docket No. P-0185

- 21. (Original) The method of claim 20, wherein the transmitted data is stored as final data frame.
- 22. (Original) The method of claim 20, wherein the stored data is re-transmitted if receipt of the data is not acknowledged within a prescribed period of time.
- 23. (Original) The method of claim 22, wherein the stored data is re-transmitted if a negative acknowledgment is received during the prescribed period of time.
- 24. (Original) The method of claim 20, wherein the communication system is a wireless local loop.